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Physical Activity Patterns in Ontario – II



**A Research Report
from the Ministry of
Tourism and Recreation**



**Fitness
Ontario**



**Ministry of
Tourism and
Recreation**

Ontario

**Hon. Reuben C. Baetz
Minister
John R. Sloan
Deputy Minister**

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**A Research Report from
the Ministry of Tourism
and Recreation**

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Ontario



Ministry of
Tourism and
Recreation

January 1983

It is my pleasure to make public this report on physical activity in Ontario.

Since 1978, the activity patterns of Ontario adults have been measured through a series of spring and fall surveys. This consistent and uniform methodology is unique in Canada. The report is an update of "Physical Activity Patterns in Ontario", originally released by my Ministry in January 1981.

The results of these surveys are encouraging. The level of physical activity in the province has increased over the last three years, to the point where the majority of Ontarians -- 56% -- are active at least once a week.

Nonetheless, the surveys also reveal that there is still a great need to provide the encouragement and programming that will ultimately increase the amount and intensity of the activities pursued. And that is the challenge before Ontario's fitness community.

This information should be useful to those involved in the planning, promotion and marketing of fitness programs. Should you wish further information, please consult my staff at Fitness Ontario, or contact your local Community Programs office of the Ministry of Tourism and Recreation.

Yours sincerely,

Reuben C. Baetz
Minister

Summary of Major Findings and Implications

General Implications

Interest and participation in physical activity are now widespread throughout Ontario.

Fitness participation – both in terms of numbers of people active and how much activity they do – has increased significantly over the last three years. Increases in physical activity have occurred for *all* age groups, not just the young. In addition, activity by women has increased to the extent that at least as many women as men are exercising regularly.

All indicators suggest that this widespread interest and participation in physical activity is not just a “fad”. Indeed, it appears that despite an aging population, exercise participation is likely to continue to increase.

This means that demand for fitness facilities and programs, information about how to exercise, and other spinoffs of the active lifestyle are likely to continue.

But there remains significant room for improvement. The major challenges for fitness planners, managers, and programmers are:

- to help *active* people, especially *beginners*, to *maintain* their activity;
- to help *low active* people to *increase* their levels of activity;
- to help *interested* people *begin* to participate in a suitable activity.

Here are the more significant findings of this report: *Physical Activity Patterns in Ontario – II*. Major implications of these findings for fitness planners, managers, programmers, and marketers are also pointed out.

Frequency of Participation

Findings

- 56% of Ontario adults are physically active at least once per week.
- This represents a 7% increase from November 1978 to November 1981.
- This increase is entirely due to those who are active three times a week or more, a group which increased by 11%, to 37% of all adults. In fact, the number of people active only once a week declined slightly, from 23% to 19%.
- More people are active in spring than in fall.

Implications

- The Ontario market for fitness services and programs is sizeable and increasing.
- Most people who are now active are involved in considerably more than a trivial level of activity, which indicates their commitment to an active lifestyle.
- Fitness practitioners, wherever possible, should assist people active just once or twice a week to increase the frequency of their activity.
- People active only at certain times of the year should be encouraged to be active year-round. This would involve pointing out to them alternative activities not affected by the weather, or activities more appropriate for other seasons.

Characteristics of Participants

Findings

- The most popular activities (surveyed in June and November) include:
 - walking
 - individual and group calisthenics
 - jogging/running
 - swimming
 - bicycling
 - skating/hockey
 - baseball
 - tennis
- Participation in these activities varies according to the time of year.
- Degree of activity for participants was calculated in terms of total amount of energy expenditure. Findings for November 1981 were:
 - 22% - high (6500 or more Mets)
 - 18% - medium (3000 - 6499 Mets)
 - 21% - low (1 - 2999 Mets)
 - 39% - non-participants

This represents an increase over the previous year of 5% in the high active category.

- A significant number of people who start exercise activities drop out later.

Implications

- Individuals should be asked what activities they enjoy or currently do. This should be taken into account when developing exercise programs for them.
- Fitness programmers should encourage individuals active at low levels to increase the degree of their activity.
- To minimize the number of people who drop out of exercise programs, fitness practitioners should attempt to understand difficulties individuals face in exercising regularly. They should provide necessary incentives, encouragement, and follow-up - particularly to beginners - and to help them stay active.

Activity by Women

Findings

- Frequency of participation by women in fitness activities has been increasing at a slightly greater rate than for men.
- For the first time, at least as many women in Ontario as men (57% vs. 55%) are physically active at least once a week. This also holds for activity three times a week or more (38% for women vs. 36% for men).
- Women tend to engage in different activities than men and at a lower level of energy expenditure.
- More women than men say they should be more active than they are. Twice as many women than men admit that they have found it difficult to stay with exercise programs they had started.

Implications

- Interest and participation among women in fitness activities is at a high level, and increasing. Fitness managers, programmers, and marketers should recognize this in providing programs and opportunities for women.
- The particular needs, interests, and motivations of women should be considered when developing programs for them.
- More information and support is needed to help women begin and particularly to maintain regular exercise.
- Women should be encouraged to exercise at levels providing a high degree of fitness.

Participation by Age

Findings

- While more younger adults than older adults are physically active, the difference is not as great as commonly believed. A substantial number of people of all ages participate in some form of physical activity.
- In fact, older people have increased their activity even more than younger people. Over the last three years, the increase in participation of seniors was about 15%, compared to 4% for those aged 18-29.

Implications

- Activity is no longer exclusively a phenomenon of the young. As people age, they now appear to be maintaining, or in some cases even increasing, their level of physical activity.
- People of all ages can use exercise programs and opportunities. In particular, the needs and interests of older adults should be considered.
- General “awareness information” is less necessary, since the vast majority of people already *are* aware of the need for fitness – 83% of Ontario adults are either active or recognize that they should be.
- Data from these surveys suggest three potential target groups for fitness promotion and programs:

Feeling about Physical Activity

Findings

- Most people – 56% in November, 1981 – feel they should be more active.
- 57% of inactive people say either that they are definitely planning to begin some form of physical activity in the near future, or would like to do so.
- Inactive people cite “lack of time” as the major reason for their lack of exercise, followed by “need more encouragement”.

Implications

- The increasing interest in physical activity among active and inactive people alike further suggests that fitness is not a temporary phenomenon. On the contrary, activity likely will increase over the next few years.
- Fitness managers and practitioners should make available the following for the sizeable number of people who either *are* active or wish to be so:
 - specific information about what activities to do, how, and where;
 - encouragement and support;
 - appropriate programs and facilities; and
 - advice about how regular exercise can be fitted into a busy schedule.

- beginners – to assist and support those who have recently begun to exercise to *maintain* this activity;
- low actives – to encourage and assist those who are active, but at a low level, to *increase* their activity;
- interested inactives (planners) – to provide those who are presently inactive but would like to be involved, with encouragement, information about what to do, and appropriate programs and activities they can begin.

Notes on the Survey

Methodology

Data collection and computer analysis of the raw data were carried out by the Canadian Gallup Poll Ltd. as part of their Ontario Omnibus Surveys. Interviews were conducted twice yearly, in November and June, from November 1978, through November 1981. Approximately 1000 adults, randomly selected from across Ontario, were interviewed for each survey. A profile of the sample, as well as a copy of the questionnaire are included in the Appendices.

Questionnaires for the surveys discussed in these reports were developed by staff of the Ministry of Tourism and Recreation. They were responsible for the data analysis and preparation of this report.

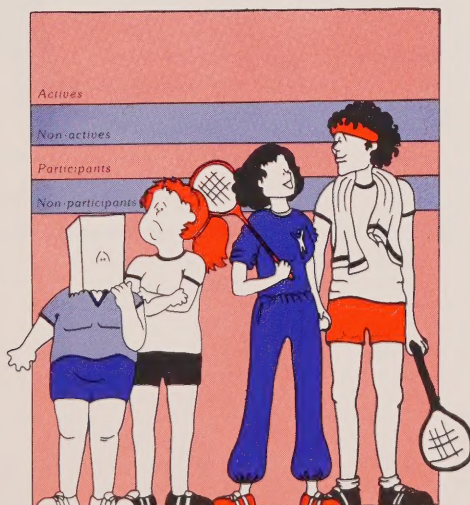
Definition of Terms

Participants

those who have participated in a physical activity at least once in the previous month (1 time per month or more)

Non-participants

those who have not participated at all during the previous month (less than 1 time per month)



Definition of terms.

Actives

those who have participated at least once a week within the previous month (1 time per week or more)

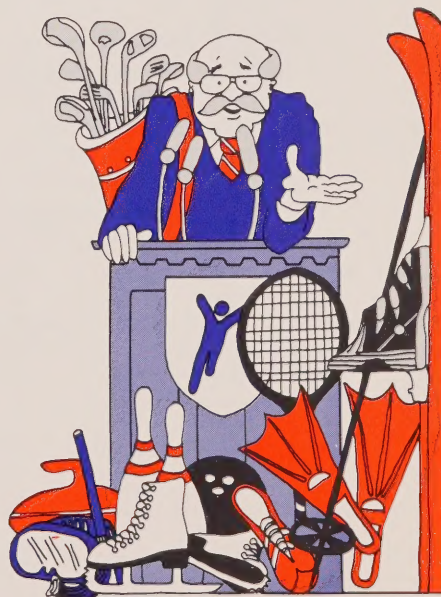
Non-actives

non-participants plus others who have not participated at least once per week (less than 1 time per week)

Cautionary Note

The data collected in these surveys, while of the highest quality possible, must still be treated with a degree of caution. The picture portrayed is a provincial profile of activity patterns in Ontario and is accurate at this general level of description.

Due to sampling error, figures are only accurate within a certain range. For example, figures regarding the Ontario population, based on a sample of approximately 1000 are accurate within a range of about 3-4%. Small differences of up to 5% between figures based on two samples of 500 people are probably not statistically significant. Similarly, differences of less than 10% between two groups of size 200 are not significant.



A cautionary note.

Introduction

In the 1970's, many people became more aware of their need for physical activity - partially to deal with the stresses of modern living - and partially, because they felt more alive physically and mentally. People became more committed to a healthier way of life. This trend is continuing into the '80s.

While there has been much discussion and interest in this increased awareness and participation, until recently there has been relatively little sound information on who is participating, why and how they participate, the kinds of activities they participate in and changes in these factors over time.

This report is a continuation of an effort to provide some of this information to community fitness agencies, and others engaged in fitness planning and promotion. Since 1978, the Ministry of Tourism and Recreation, through Fitness Ontario, has commissioned regular spring and fall surveys on the physical activity patterns of Ontario adults. This current report summarizes survey findings on trends studied up to November 1981. It supersedes "Physical Activity Patterns in Ontario", which only covered surveys carried out in 1978 and 1979.

The surveys have been based on a uniform methodology and data base so as to produce scientifically consistent and comparable results. By using identical methodologies - same questions, sample size, survey procedures, etc. - meaningful comparisons can be made for effective planning. This method of research also means that isolated "peaks" and "fluctuations" in trends can be accounted for.

These physical activity surveys are the only ones in Canada repeated on a regular basis.

Major Aspects of Activity Patterns

This study examines trends in physical activity participation, based on the following factors:

- how frequently people engage in physical activity;
- what types of activities they engage in degree of activity, in terms of energy expenditure;
- whether they feel they get sufficient physical activity or not;
- reasons for not being active plans to become active;
- differences in exercise patterns by sex, age and other factors.

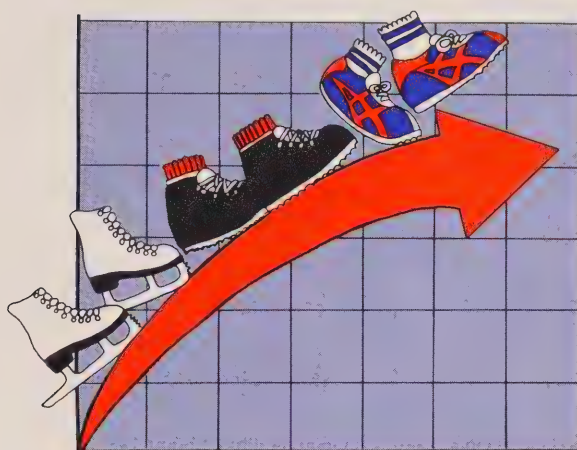


Major aspects of physical activity.

Participation and Frequency of Physical Exercise

Perhaps the most significant finding of the entire survey is revealed in this section of the report:

Physical activity in Ontario is increasing. The rise in interest and participation in physical activity is continuing a trend that started in the 70's.



Active participation in physical activity, has been increasing at a steady rate.

Fifty-six per cent of Ontario adults (surveyed in November 1981) are active at least once a week. This compares favourably (see Chart 1) to the same period three years earlier when 49% were physically active at this level.

Within these statistics is a more interesting factor that could influence fitness programming in the near future:

This increase in physical activity is entirely due to those who are active three times a week or more (see Chart 2). In fact, the number of people active only once or twice a week actually declined slightly.

In November of 1978, 26% of adults were active at least three times per week. By November 1981 this figure had risen to 37%, an increase of 11%.

For fitness managers and practitioners, this frequency of activity presents some interesting challenges. Those who are active, three times a week or more, are serious about their activities. However, this category is where fluctuations in patterns will occur most.

Chart 1 also illustrates that there are seasonal variations in exercise patterns. People tend to be more active in June rather than November. Further, in the two-year period from June 1979 to June 1981, there was an increase of 12% among those active once a week or more.



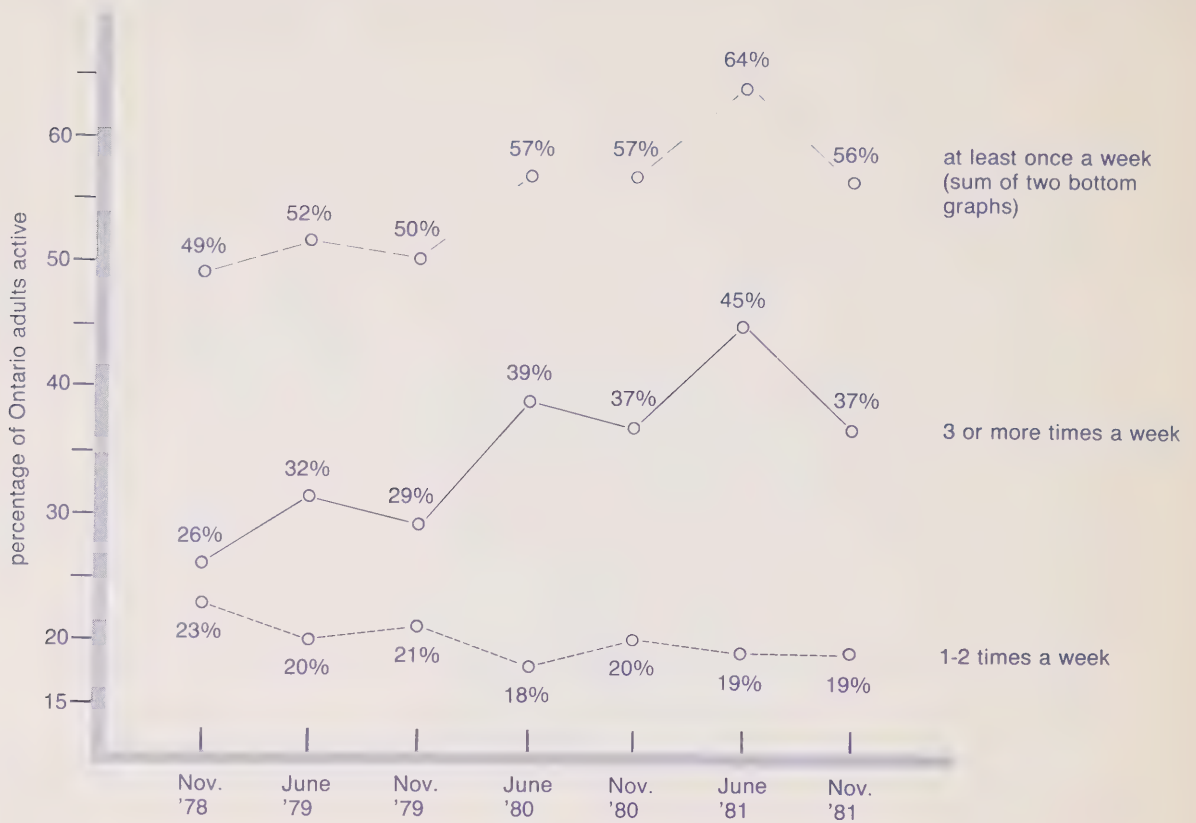
There are seasonal variations in exercise patterns.

CHART 1

Frequency of Participation in Physical Activity

FREQUENCY OF ACTIVITY	NOV. '78	JUNE '79	NOV. '79	JUNE '80	NOV. '80	JUNE '81	NOV. '81
3 or more times a week	26%	32%	29%	39%	37%	45%	37%
1 or 2 times a week	23%	20%	21%	18%	20%	19%	19%
ACTIVE (once a week or more)	49%	52%	50%	57%	57%	64%	56%
1-3 times a month	7%	6%	6%	6%	6%	6%	6%
PARTICIPANTS (once a month or more)	56%	58%	56%	63%	63%	70%	62%
Number of cases	1033	1067	1099	1086	1074	1097	1049

CHART 2
Frequency of Activity



When Regular Activity Started

In November 1981, 85% of the surveyed active participants indicated they had been active regularly for over a year; 15% said they had started regular exercise within the past year. Each of the previous surveys showed similar findings.

The figure of 15% new exercisers every year is considerably larger than the overall increase in participants. This suggests that many people drop out of exercise programs they have started.

A major implication of this finding is that, in order to increase the number of people who exercise regularly, fitness programmers should first find out why people drop out, and second, provide incentive and assistance to sustain such activity.

The characteristics of people who have difficulty staying with an exercise program are discussed in greater detail in another Fitness Ontario report, *Those Who Know But Don't Do*. The report also deals with ways of helping people maintain regular exercise.

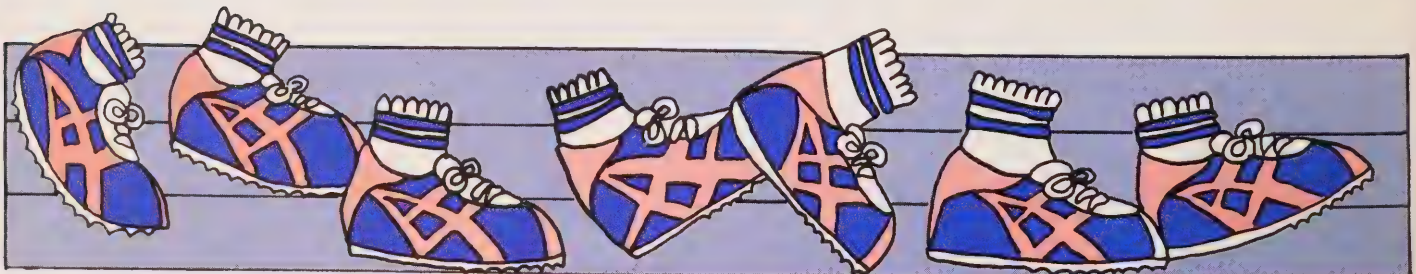


CHART 3

Activities

Per cent of all respondents participating at least once a month in activity (ranking)

ACTIVITY	JUNE 1981	NOVEMBER 1981
Walking	26% (1)	27% (1)
Swimming/Scuba	24% (2)	6% (5)
Calisthenics (individual & group exercise)	10% (4)	12% (2)
Bicycling	15% (3)	5% (6)
Jogging/Running	9% (5)	9% (3)
Skating/Hockey	2% (13)	8% (4)
Tennis/Badminton/Table Tennis	6% (6)	3% (11)
Golf	6% (6)	2% (13)
Squash/Racquetball/Handball	3% (11)	5% (6)
Weightlifting	3% (11)	4% (9)
Gardening	5% (9)	2% (13)
Baseball	6% (6)	* (17)
Bowling	1% (17)	5% (6)
Dancing	2% (13)	4% (9)
Basketball/Volleyball	2% (13)	3% (11)
Boating/Fishing	4% (10)	* (17)
Football/Rugby	1% (17)	2% (13)
Soccer	2% (13)	* (17)
Curling	* (20)	2% (13)
Yoga	1% (19)	* (17)
Other	3%	7%
Non-participants	30%	38%
Number of cases	1102	1055

NOTES:

1. Totals are greater than 100% since many individuals participated in more than one activity.
2. These figures should be treated as approximate. Small percentages are based

- only upon responses of only a very few individuals (see Cautionary Note on page 1).
3. Percentages less than half of one per cent are indicated by an asterisk (*).

Types of Activity

Those who participated in the survey were asked (see Chart 3) to indicate the activities they engaged in. These were ranked in order of preference. Perhaps as no surprise, *walking* was the most popular activity, measuring 27% of the population. Other popular activities include calisthenics (individual and group exercise), jogging, swimming, and bicycling.



Perhaps as no surprise walking was the most popular activity.

The popularity of many activities is, of course, seasonal. Chart 4 shows the most popular activities for each spring and fall survey period. Bicycling, for example, is more popular in June than in November. Skating, on the other hand, ranks higher in the fall. Other activities, such as jogging, are popular all year round.

It is interesting to note that many people tend to engage in more than one activity. For example, most people who walk also do something else.

Also, because of the timing of the surveys, participants were asked for the activities they engaged in from mid-October to mid-November and mid-May to mid-June. These periods could be transitional times for seasonal activities and could account for curling and gardening being equally popular in November.

Nonetheless, overall, these findings indicate a remarkable consistency in activity profiles with no major change in the popularity of activities from one year to another.

CHART 4

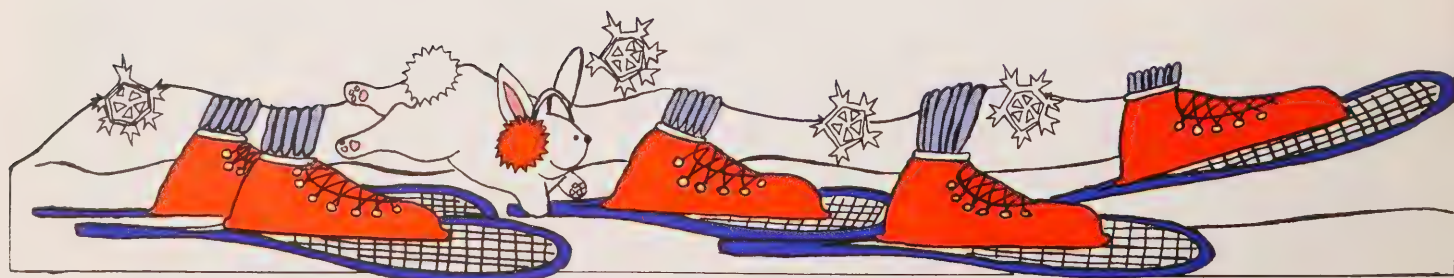
Most Popular Activities by Season

NOVEMBER 1978		NOVEMBER 1979	
Walking	20%	Walking	20%
Calisthenics (indiv. & group)	11%	Calisthenics (indiv. & group)	12%
Jogging/Running	9%	Jogging/Running	9%
Skating/Hockey	8%	Skating/Hockey	8%
Swimming/Scuba	7%	Swimming/Scuba	7%

NOVEMBER 1980		NOVEMBER 1981	
Walking	29%	Walking	27%
Calisthenics (indiv. & group)	12%	Calisthenics (indiv. & group)	12%
Jogging/Running	10%	Jogging/Running	9%
Skating/Hockey	8%	Skating/Hockey	8%
Swimming/Scuba	6%	Swimming/Scuba	6%

JUNE 1979		JUNE 1980		JUNE 1981	
Walking	15%	Walking	24%	Walking	26%
Bicycling	13%	Bicycling	13%	Bicycling	15%
Swimming/Scuba	11%	Swimming/Scuba	11%	Swimming/Scuba	24%
Jogging/Running	10%	Jogging/Running	9%	Calisthenics (indiv. & group)	10%
Calisthenics (indiv. & group)	9%	Tennis	9%	Jogging/Running	9%
Baseball	7%	Baseball	8%	Baseball	6%
Tennis	7%	Calisthenics (indiv. & group)	7%	Tennis	6%

Figures indicate per cent of respondents for each sample who participate in each activity.



Degree of Activity

To this point, the report has dealt with the number of participants and frequency of activity. It has not addressed the overall quality of activity. For example, considerably more energy is expended by a 40 minute vigorous run or hard game of squash than by a relaxed 40 minute walk.

To estimate the degree of activity in terms of energy expenditure, a physical activity index was devised to consider the following factors:

- type of activity;
- frequency of participation;
- average length of time for each exercise session;
- intensity of participation (e.g., vigorous vs. relaxed run).



The degree of activity.

Four categories have been developed. They are: "non-participants", "low", "medium" and "high", and are measured in terms of energy expenditure as expressed in Mets. (Refer to Appendix III for a more detailed description of the index, rating assigned to various activities, and definition of Mets. Chart 23 in Appendix III contains examples of activities which would fall within each of the high, medium and low categories.)

The criterion used for the "high active" category, (6500 Mets per month), while somewhat arbitrary, is consistent with the minimum amount of activity suggested by other research studies to provide protection against coronary heart disease.

Other surveys similar to this one also have used this criterion.

Findings

Chart 5 indicates the degree of activity for Ontario adults surveyed. In November 1981, only 22% took part in sufficient activity to fall into the "high active" category; another 18% qualified for the "medium" slot while the "low" and "non-participants" categories represented 21% and 39% respectively.

Earlier in this report, it was revealed that the majority of Ontario adults (56%) engage in physical activity at least once a week and 37% three times a week. While these findings are encouraging, those presented in Chart 5, regarding degree of activity, give a somewhat different picture. Only 22% of adults engage in exercise at the "high active" level. Thus, there is room for considerable improvement.



Only 22% of adults exercise at high levels of energy expenditure.

Nonetheless, there are positive signs. During a time when frequency of participation remained constant (November 1980 to November 1981; see Chart 1), 5% of people surveyed in fact moved to the high level of activity (see Chart 5). There was, therefore, somewhat greater activity among those already active.

CHART 5
DEGREE OF ACTIVITY

DEGREE OF ACTIVITY	TOTAL METS/MONTH	Per cent of all respondents		
		NOV. '80	JUNE '81	NOV. '81
Non-participants	0	37%	31%	39%
Low	1-2999	28%	24%	21%
Medium	3000-6499	18%	17%	18%
High	6500 & over	17%	28%	22%
		100%	100%	100%
Number of cases		1058	1081	1036

Sex Differences

Chart 6 illustrates that women are now at least as physically active as men. While the difference is not statistically significant, Chart 9 reveals that:

For the first time in three years, since the surveys were first taken, women now appear to be slightly more active than men (57% vs. 55%).



Women are now slightly more active than men.

Also, whereas in the past, there were greater seasonal fluctuations in women's activity patterns, the data shows that women not only participate as much as men, but also do so along identical seasonal patterns.

This increase in participation has been growing over the last three years. Prior to that time, women tended to be less active than men and there was considerable variation in their exercise patterns (from spring to fall). As Chart 9 illustrates, that is not the case today, and it is a trend that appears likely to continue.

Women in business are also making significant strides. Statistics show that, within the professional/executive category, 78% of women are active at least once a week, compared to 60% of men.

Exercise is no longer the exclusive domain of men. Men should not be regarded as the sole target of fitness marketing efforts.

Fitness planners should thus consider developing programs and promotions which are directed at this growing market.

Frequency of Activity

The slight edge women have over men also includes the frequency of activity. Women are just as serious about activity as men. Chart 10 shows that the same number of women and men are active at least three times per week. Indeed, at least as many women as men (in November 1981) are active at this level (38% of women compared to 36% of men). In the once-a-week category, men and women were equal at 19%.

Degree of Activity

Although there have been considerable advances made by women in physical activity patterns, there are still significant differences in the type of activities pursued and the fitness benefit achieved. For example, women are more inclined to walk, swim or take part in general exercise, whereas a greater number of men jog or run. In general, men tend to participate in somewhat more strenuous activities than women, and also spend more time in an average exercise session.



In general, men tend to participate in somewhat more strenuous activities than women.

Chart 7 lists the activities followed by men and women. The number in parenthesis indicates the popularity rankings of the activity. In Chart 8 the degree of activity intensity is determined by the number of Mets expended per month. In November 1981, (see Chart 11), 27% of men engaged in sufficient degree of exercise to be classed at the high active level. Only 17% of women were similarly qualified.

Therefore, while women are now as active at least as often as men, they still do not expend the same levels of energy.

Clearly, the next step for active women is to increase the amount and intensity of their exercise.

The survey findings make it clear that women and men prefer somewhat different activities and programs in exercising. The role of the fitness professional should be to provide programs aimed at women which cater to their interests and to encourage them to exercise at levels which will allow them to achieve a higher level of fitness.

CHART 6

Frequency of Participation in Physical Activity by Sex

FREQUENCY OF ACTIVITY	WOMEN	MEN	TOTAL
3 or more times a week	38%	36%	37%
1 or 2 times a week	19%	19%	19%
ACTIVE (once a week or more)	57%	55%	56%
1-3 times a month	6%	6%	6%
PARTICIPANTS (once a month or more)	63%	61%	62%
Number of Cases	526	525	1051

Data from the November 1981 survey

CHART 7

Most Popular Activities by Sex

Per cent of respondents participating at least once a month (ranking)

ACTIVITY	WOMEN	JUNE 1981		TOTAL	NOVEMBER 1981		TOTAL
		MEN			MEN		
Walking	31% (1)	21% (1)		26% (1)	33% (1)	21% (1)	27% (1)
Swimming/Scuba	29% (2)	19% (2)		24% (2)	8% (3)	4% (6)	6% (5)
Bicycling	18% (3)	11% (3)		15% (3)	5% (5)	6% (5)	5% (6)
Calisthenics (indiv. & group)	11% (4)	9% (6)		10% (4)	17% (2)	8% (4)	12% (2)
Jogging	8% (5)	10% (4)		9% (5)	6% (4)	11% (3)	9% (3)
Baseball	3% (7)	10% (4)		6% (6)	*	1%	*
Tennis	6% (6)	6% (7)		6% (6)	2%	4%	3%
Skating/Hockey	2%	2%		2%	4% (6)	12% (2)	8% (4)

* Less than half of one per cent

CHART 8

Degree of Activity by Sex

Per cent of all respondents

DEGREE OF ACTIVITY	TOTAL METS/MONTH	JUNE 1981		NOVEMBER 1981	
		WOMEN	MEN	WOMEN	MEN
Non-participants	0	31%	30%	38%	39%
Low	1-2999	25%	21%	25%	18%
Moderate	3000-6499	17%	18%	20%	16%
High	6500 & over	26%	31%	17%	27%

CHART 9

Per Cent active (at least once a week) by Sex

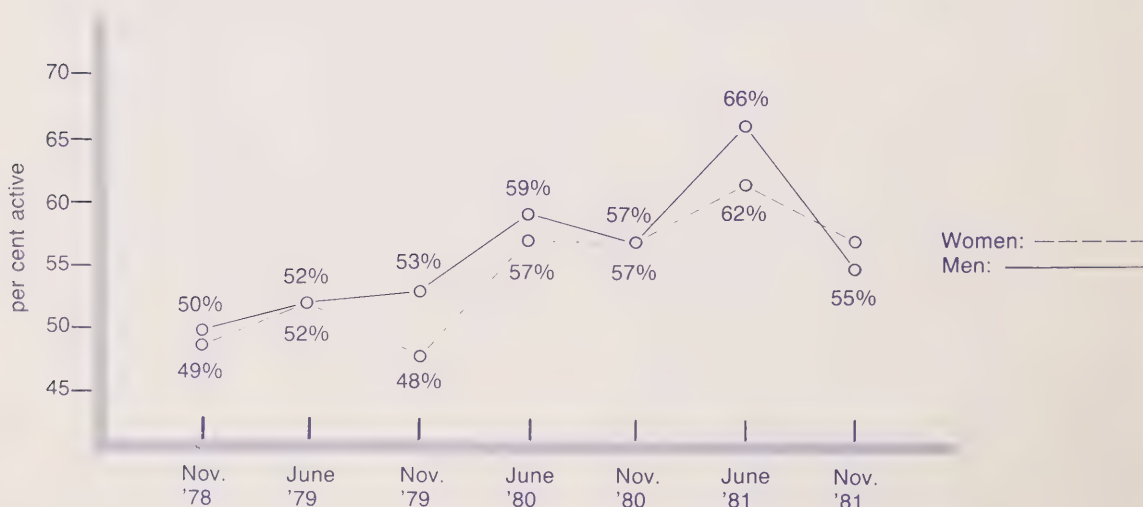


CHART 10

Frequency of Activity by Sex

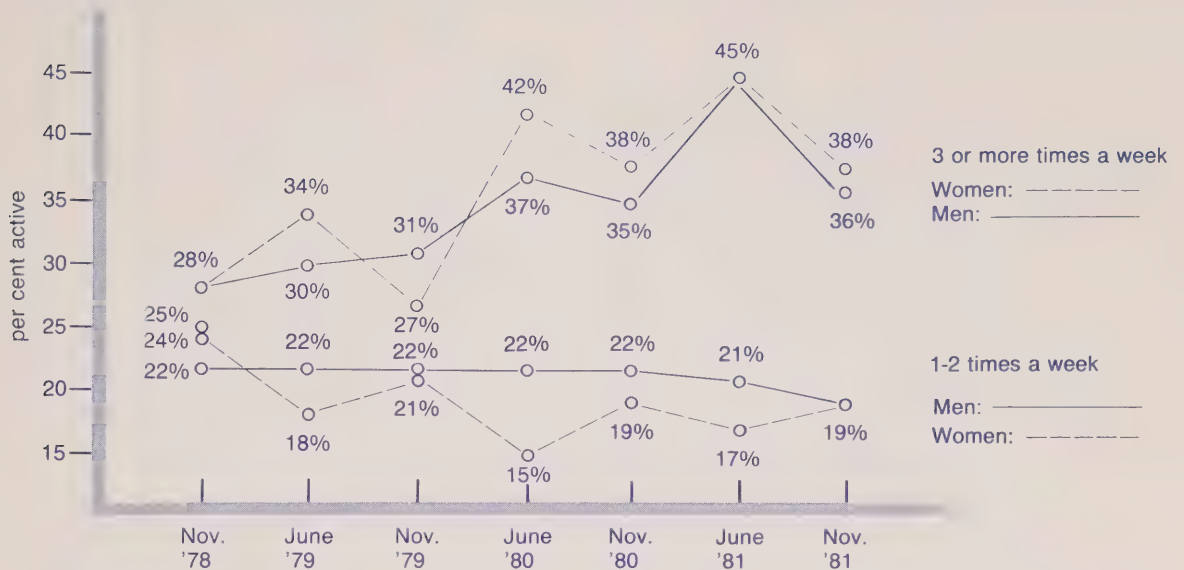
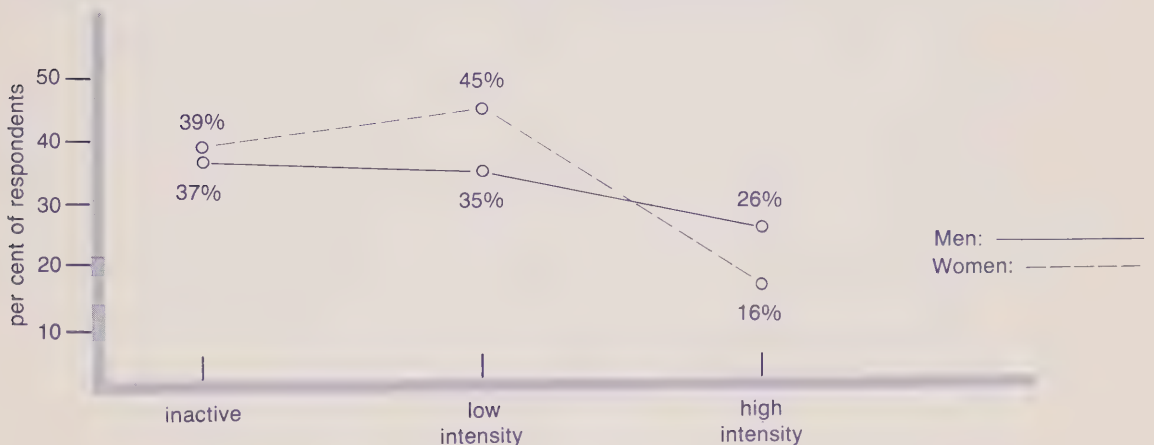


CHART 11

Average Intensity of Exercise by Sex



Data from the November 1981 survey.

Age Differences

Findings from these surveys confirm data from other sources which indicate that, in general, younger people are more active than older people. However, these differences are not as great as many may think. Substantial numbers of people at all ages are involved in some degree of physical activity.

For example, in November 1981, (see Chart 13), 66% of those aged 18-29 were active at least

once a week. For those aged 30-49, the activity level was 57%. About half (51%) of seniors (65 and over) were active compared to 44% of those in the 50-64 age bracket.

Chart 13 also illustrates that there have been increases over the last three years in the number of people active in all age groups.

Over the same period, the increase among seniors was about 15%. This should dispel any notion that older people participate only infrequently, or are not interested in physical activity.

In fact, older people have increased their activity even more than younger people! In the 18-29 age group, there was only a 4% increase in activity from November 1978 to November 1981.



Older people have increased their activity even more than younger people.

Significantly, compared to three years ago there are now more people active at least three times a week over the last three years for *each* of the four age groups (see Chart 14). Indeed, the greatest increase of participants exercising at least three times a week was found among the 30-49 and 65 and over age groups.

Degree of Activity According to Age

For people under 50, activity tends to be somewhat greater in spring over the fall (see

Chart 13). For the older age groups, however, year-round activity is more constant, with minimal variations. The type of activities engaged in also varies somewhat according to age. Chart 12 indicates specific activities engaged in by each group for June and November, 1981.

As can be seen from the table, older people are less likely to engage in strenuous activities. For example, they are likely to opt for walking rather than jogging.

The degree of activity (in terms of energy expenditure) engaged in by the various age groups is illustrated in Chart 15. As expected, younger people (18-29) have the highest degree of activity, with 26% classified as high actives. There is, however, only a small difference between them and the 30 to 49 age group, 24% of whom were classified as high actives.

On examining the degree of activity only among those who engage in any activity and excluding non-participants, there is no difference between the two younger groups.

This suggests that, up to middle age, one's age is not as much a determinant of physical activity as it used to be. Activity is no longer exclusively a phenomenon of the young.

Implications

These findings indicate that, while fewer old than young people are active, interest and participation are increasing at the same or greater rate among people in the older age groups.

This suggests that serious consideration should be given to the development of exercise opportunities and fitness programs for all ages.

CHART 12

Participation in Activities by Age

Per cent of respondents participating at least once a month (ranking)

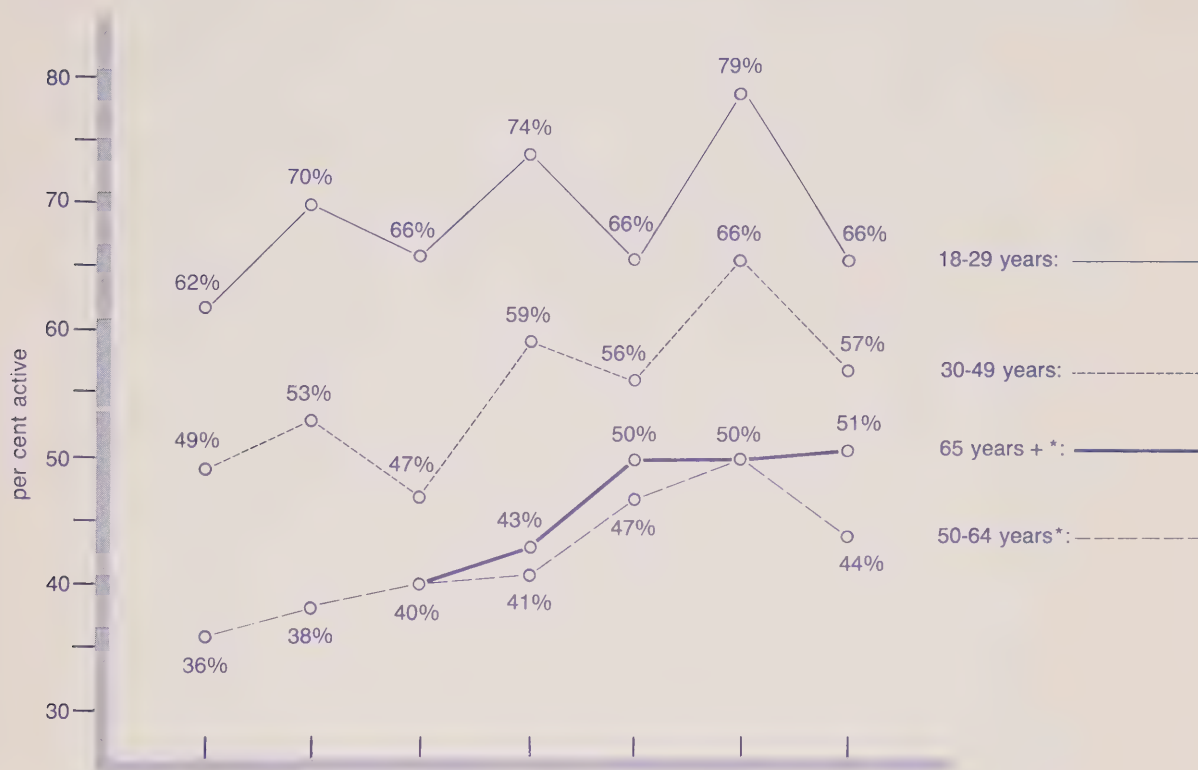
ACTIVITY	TOTAL	JUNE 1981 AGE					NOVEMBER 1981 AGE				
		18-29	30-49	50-64	65+		18-29	30-49	50-64	65+	
Walking	26%(1)	21%(3)	26%(1)	27%(1)	36%(1)	27%(1)	20%(1)	28%(1)	30%(1)	37%(1)	
Calisthenics (indiv. & group)	10%(4)	10%(5)	11%(4)	10%(3)	8%(2)	12%(2)	15%(3)	14%(2)	7%(2)	10%(2)	
Jogging	9%(5)	16%(4)	9%(5)	2%	1%	9%(3)	14%(4)	11%(3)	3%(3)	*	
Skating/ Hockey	2%	6%	1%	1%	*	8%(4)	16%(2)	8%(4)	1%	*	
Swimming/ Scuba	24%(2)	37%(1)	26%(1)	12%(2)	6%(4)	6%(5)	10%(5)	6%(5)	4%(5)	1%	
Bicycling	15%(3)	20%(2)	18%(3)	10%(3)	3%	5%(6)	7%(6)	6%(5)	5%(4)	2%	
Bowling	1%	1%	1%	1%	2%	5%(7)	6%(7)	5%(7)	2%	6%(4)	
Gardening	5%	3%	5%	7%(5)	8%(2)	2%	*	*	3%	9%(3)	

* Less than half of one per cent

The so called "baby boom" generation, with many members now passing 30 years of age, is showing no signs of retreating to a sedentary lifestyle. This reinforces the view that exercise participation, far from being a passing fad is here to stay and will likely grow in the future.

CHART 13

Per Cent Active (at least once a week) by Age Group

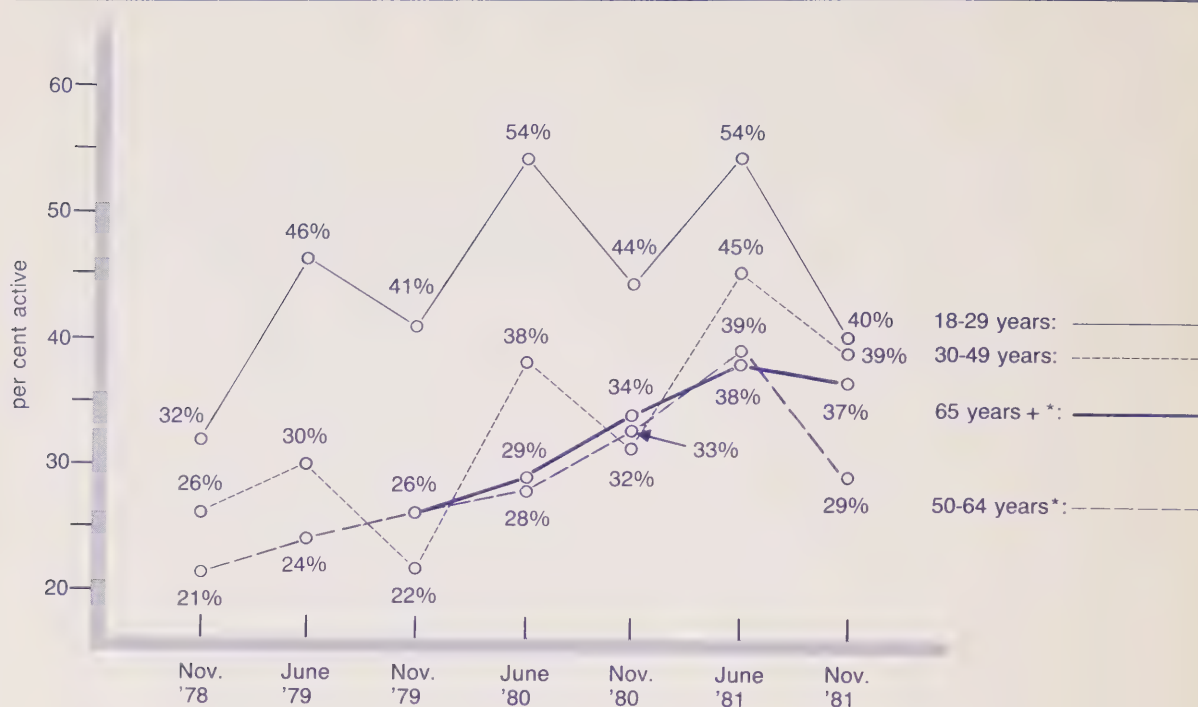


*For November 1978, and June and November 1979, data shown are combined for ages 50-64 and 65 +



CHART 14

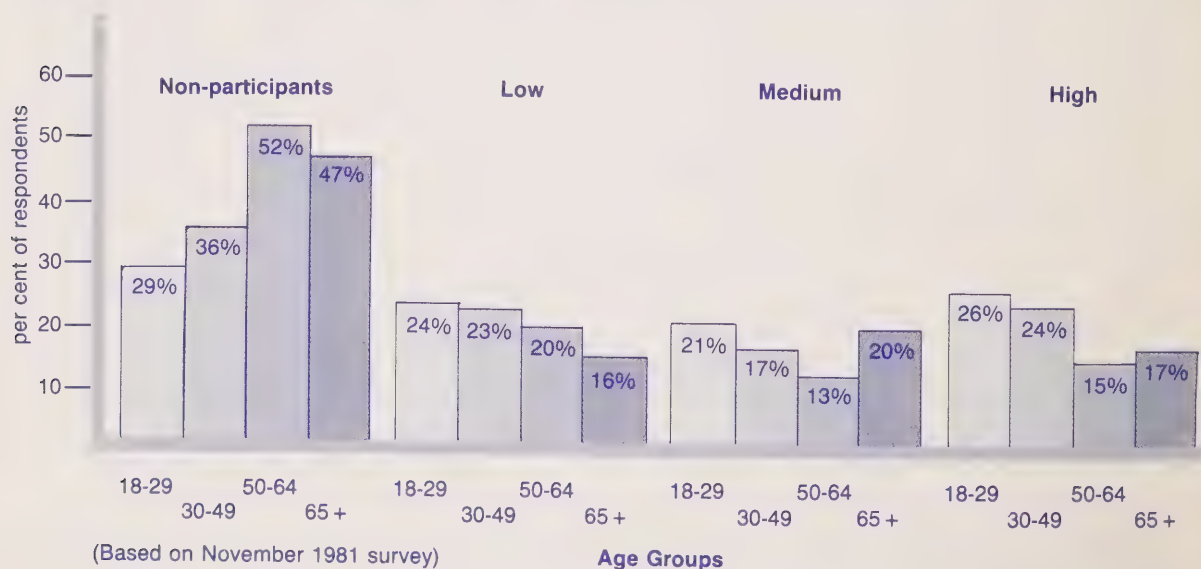
Per Cent Active at Least Three Times a Week by Age Group



*For November 1978, and June and November 1979, data shown are combined for ages 50-64 and 65 +

CHART 15

Degree of Activity for Each Age Group



Socio-economic Characteristics

Chart 16 illustrates participation by highest level of education achieved, occupational category, and family income during November 1981.

Those who participate in physical activity of some kind tend to be better educated, enjoy higher incomes and be employed in professional/executive or sales/clerical positions.

Chart 17 shows changes in participation by education from November 1979 to November 1981. The increases in participation, referred to earlier in this report, have been among those with high school or higher education. There have been no significant increases in activity among those with only a public school level of education.

This pattern, indicated for education, also holds with regard to occupation.

CHART 16

Participation (at least once a month) by Socio-economic Characteristics

CHART 16 (a): Education

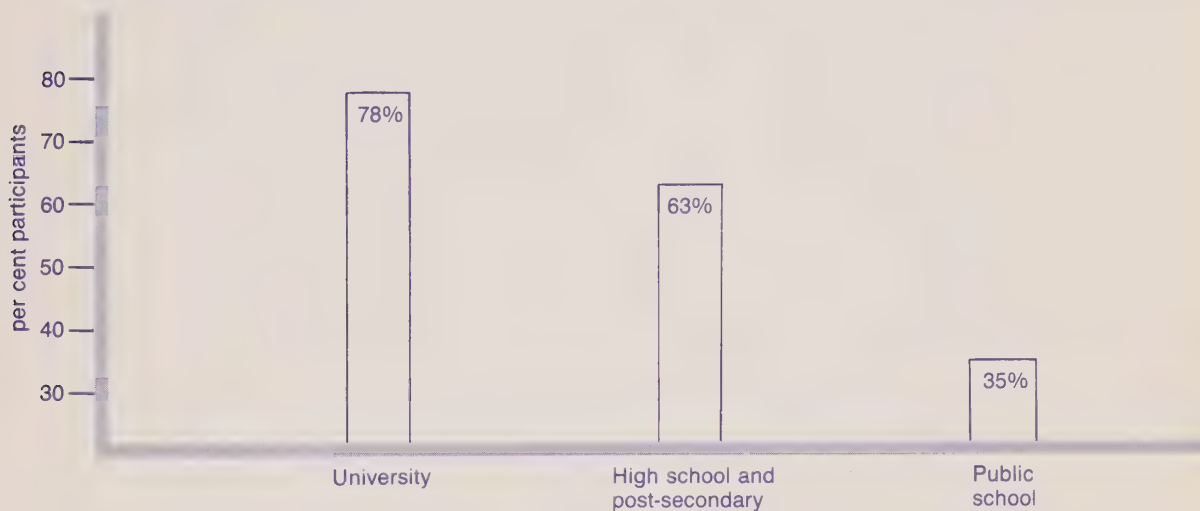


CHART 16 (b): Occupation

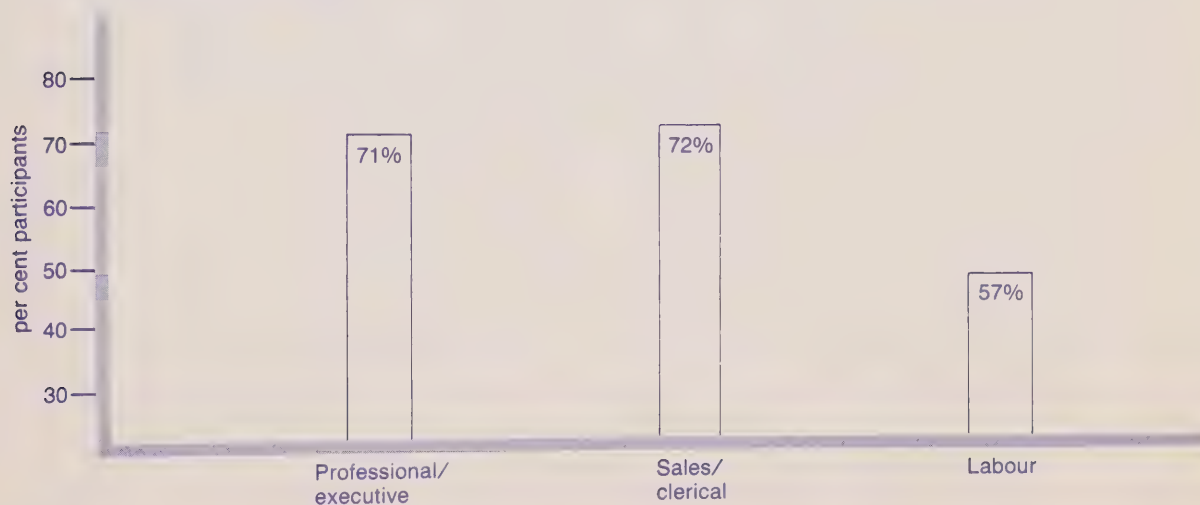


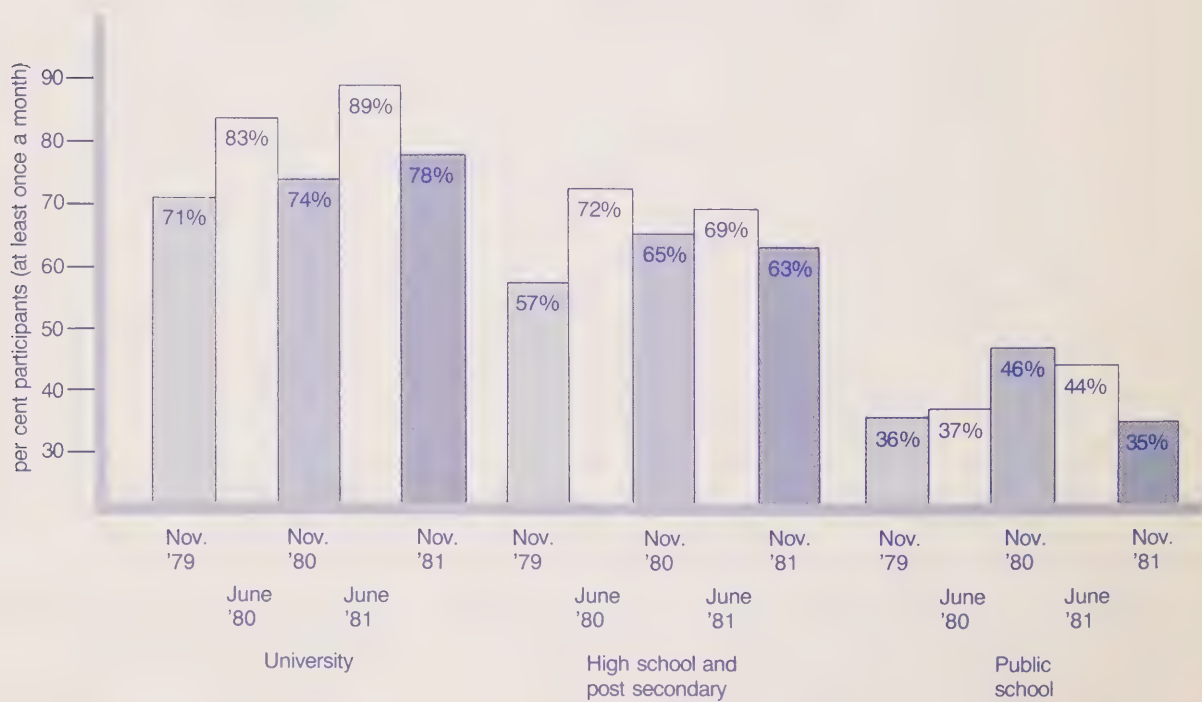
CHART 16 (c): Family Income



(Based on November 1981 survey)

CHART 17

Participation by Education Level



Difference by Region and Community Size

Region

There were no significant differences found in exercise participation between one region of Ontario and any other. This indicates that interest and participation in physical activity are wide-spread across the province.

It is likely, however, that participation in some individual communities is higher or lower than the provincial average. The sample size of the survey did not make it possible to examine participation in *specific* communities.

Community

Some significant findings do crop up when examining communities in terms of their size. As Chart 18 indicates, there are significantly fewer people in rural areas who are active at least once a week, than in urban centres.

Furthermore, the increases in physical activity discussed previously are confined largely to cities rather than rural districts.

While the surveys do not explain the reason for this finding, fitness practitioners in rural areas should consider making available more opportunities for exercise, taking into account the needs and interests of the residents.

CHART 18

Per Cent Active (at least once a week) by Community Size

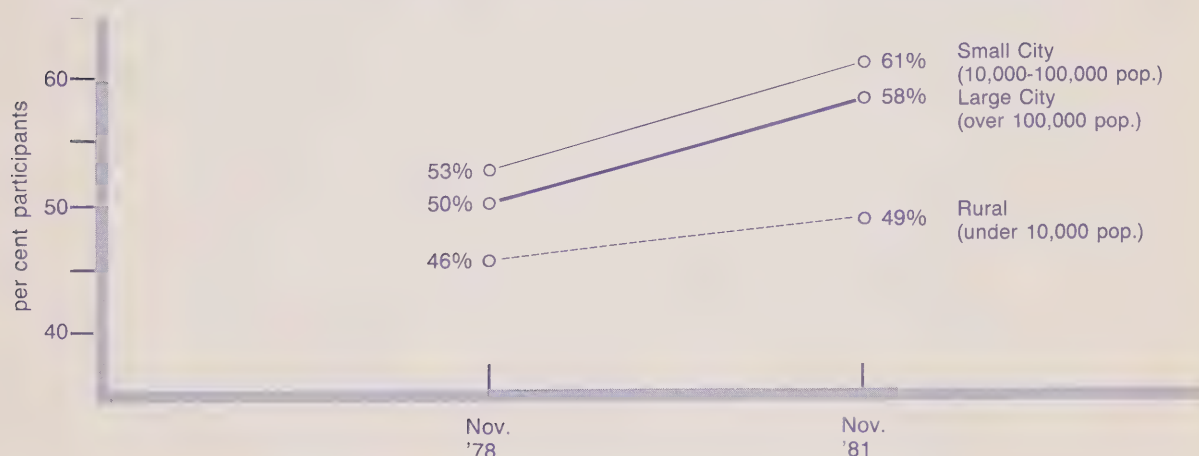


CHART 19

Do People Feel They Get Sufficient Activity?

SUFFICIENT PHYSICAL ACTIVITY?	TOTAL RESPONDENTS	NON-PARTICIPANTS	DEGREE OF ACTIVITY		
			LOW	MEDIUM	HIGH
Get sufficient activity	44%	44%	34%	42%	43%
Should get more	56%	56%	66%	58%	43%
Number of cases	1019	384	224	186	226

(Based on November 1981 survey)

Activity - Do People Feel They Get Enough?

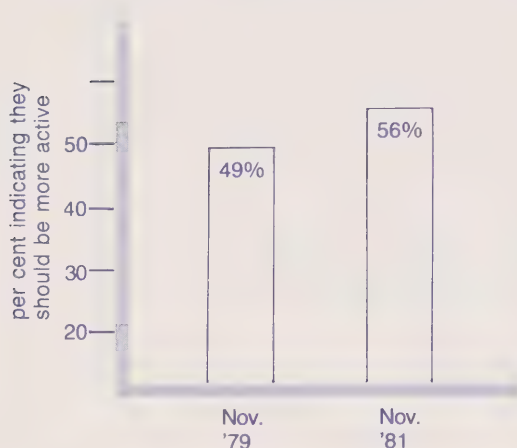
All respondents were asked if they feel they get sufficient physical activity (see Chart 19).

Fifty-six per cent of those surveyed in November 1981 felt they should be more active. This was particularly true of people

with a low degree of energy expenditure, two thirds of whom felt they should be more active.

These findings indicate an awareness among low-actives that their current levels of activity are insufficient. It suggests that promotional and motivational efforts, coupled with fitness programs aimed at this group, would be welcomed and may increase the present levels of activity.

CHART 20
Need for More Activity



Given the significant increases - documented earlier in this report - with respect to both numbers of people involved in physical activity and the frequency of that activity, one might expect improved levels of satisfaction with current patterns.

But, as Chart 20 illustrates, the opposite has occurred. From 1979 to 1981, the number of people indicating they were not satisfied and that they should get more activity has *increased* from 49% to 56%. This increase has occurred for both active and inactive people.

In other words, there is still a growing awareness of the need for increased levels of physical activity. It also suggests there may be a further increase in activity over the next few years.

Plans for Physical Activity

Twenty per cent of those currently inactive indicate that they have definite plans for beginning some form of activity in the near future. Another 37% indicate that they would like to participate in physical activity (see Chart 21).

Thus among non-active people, 57% are either definitely planning to begin some form of physical activity in the near future or would like to do so. This represents an increase of 6% from November, 1979 to November 1981.

CHART 21
Plans for Physical Activity by Perceived Need*

Plans	Total Non-actives	Non-actives Saying They Get Sufficient Activity	Non-actives Saying They Should Get More Activity
Definitely planning	20%	7%	29%
Would like to take part	37%	20%	49%
Not interested	24%	46%	9%
Physically unable	11%	13%	10%
Other	3%	6%	1%
No plans	5%	9%	4%
Number of cases	427	178	249

* (Asked only of those active less than once a week - based on November 1981 survey)

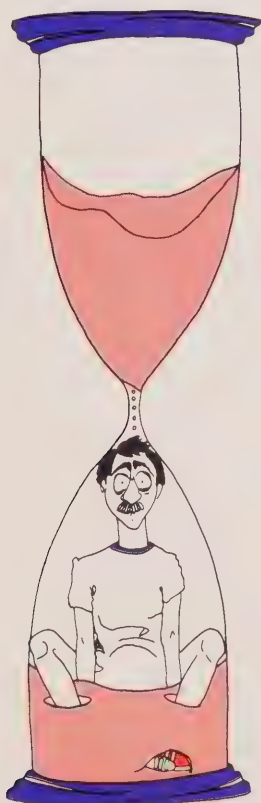
These findings have major implications for those providing - or thinking of providing - fitness programs. While there would appear to be a large body of people who are anxious to participate in fitness programs, other research suggests that many lack sufficient information about appropriate activities and where facilities are located and where programs can be pursued (see *Those Who Know But Don't Do*). Consequently, many people stop regular exercise shortly after they start.

A large number of people realize they should exercise and are interested in doing something about it.

It is clear, therefore, that there is a sizeable market of people who would respond to good fitness and exercise programs that are properly promoted.

Reasons for Inactivity

As Chart 22 indicates, people who are not active cited lack of time more frequently (30%) than any other factor. The second most mentioned factor for lack of activity was lack of encouragement. Very little in these latest findings has changed from responses given two years ago.



Lack of time for activity.



57% are now planning to begin some form of physical activity. This is a 6% increase from last year.

This suggests a further role for promotion and an ongoing need to encourage people to begin and maintain regular activity. Approaches that show how exercise can be fitted into a busy schedule would probably be most successful.

Further, there are some interesting differences with respect to response by sex. While 20% of men said there was no need for them to be active, only 8% of women indicated this.

Twice as many women (14%) as men indicated they had tried exercise but found it difficult to keep it up.

These findings once again point to the need for more information and programs directed at women who are interested in exercise.

Those men and women who indicated that they are physically unable to exercise were almost exclusively over 50 years of age. In particular, 39% of those over 65 indicated this was the reason for their inactivity. It may be that only a portion of this group have medical or other impediments that truly preclude participation in some form of exercise.

Many may feel that advanced age is sufficient reason for inactivity. While sudden vigorous activity may not be beneficial for a sedentary older person, participation in less strenuous activities, such as walking, would be beneficial for many people.

CHART 22

Reasons for Not Being Physically Active

Reason	Per Cent Not Active	SEX		AGE			
		Women	Men	18-29	30-49	50-64	65 +
Don't have enough free time	30%	31%	30%	32%	41%	28%	7%
Need more encouragement	17%	18%	16%	21%	24%	9%	8%
No need	14%	8%	20%	8%	13%	20%	19%
Physically unable	12%	11%	13%	2%	5%	13%	39%
Have tried but find it difficult	11%	14%	7%	17%	7%	11%	8%
No opportunity	6%	6%	6%	8%	5%	6%	4%
Other	6%	8%	5%	11%	3%	5%	11%
None	4%	4%	4%	2%	2%	8%	5%
Number of cases	476	228	247	114	162	119	74

(Asked only of those active less than once a week - based on November 1981 survey)

Ontario Government Sponsorship

Over three quarters (76%) of those surveyed indicated that government programs encouraging people to become more active are an appropriate activity for the government.

Support for government involvement was found among all groups surveyed, but it was greatest (85%) among those active once or twice a week.



Fitness participation has increased significantly.

Appendix I

Sample Characteristics

November 1981 Survey

	Total	Per cent
Ontario Total	1055	100 %

Region

Toronto	345	33 %
Metro Outskirts	137	13 %
Eastern Ontario	191	18 %
Western Ontario	282	27 %
Northern Ontario	100	9 %

Age

18 - 29 years	326	31 %
30 - 49 years	372	35 %
50 - 64 years	202	19 %
65 years and over	145	14 %
Did not state	10	1 %

Sex

Male	529	50 %
Female	526	50 %

Occupation of Respondent

Professional/Executive	193	18 %
Sales/Clerical	134	13 %
Labourer	242	23 %
Housewife	262	25 %
Other	194	18 %
Did not state	30	3 %

Community Size

100,000 and over	637	60 %
10,000 - 100,000	139	13 %
Under 10,000	279	26 %

Education

Public school or less	142	13 %
High school and Post-secondary	707	67 %
University	198	19 %
Did not state	3	*

Family Income

Under \$10,000	127	12 %
\$10,000 - \$14,999	92	12 %
\$15,000 - \$19,999	109	10 %
\$20,000 - \$29,999	228	22 %
\$30,000 and up	261	25 %
Did not state	238	23 %

Notes

1. Exact numbers and percentages for the other surveys discussed in this report are slightly different from those given above, due to variations in sampling.
2. Percentages may not add to 100 % because of rounding.

*Less than 0.5 percentage points.

Appendix II

References

The following are other surveys and research studies which may be of interest.

Perrin, Burt. "Survey of Physical Activity in the Regional Municipality of Waterloo." *Recreation Research Review*. Volume 6, No. 4. Feb., 1979, pp. 48-52.

The Perrier Study: Fitness in America.
Perrier - Great Waters of France, Inc.
New York: Jan., 1979.

1976 Survey of Fitness, Physical Recreation and Sport. Culture Statistics: Recreational Activities. Statistics Canada: Cat. 87-501 Occasional, Nov., 1978.

Longitudinal Data on the Participation of Canadians in Outdoor Recreation Activities: 1967 - 1976. Socio-Economic Research Division, Parks Canada SERD 77-15. Aug., 1977.

Tourism and Recreational Behaviour of Ontario Residents - Vol. 7: Profiles of Participants *Ontario Recreation Survey*. Queen's Park, Toronto: July 1977.

National Adult Physical Fitness Survey
President's Council on Physical Fitness and Sports. Washington: May, 1973.

Skinner, James S. "Physiological Implications of Physical Activity". In *Employee Fitness in Canada*. Ottawa: Health and Welfare Canada, 1975.

The Health of Canadians: Report of the Canada Health Survey. Statistics Canada: Cat. 82-538E, June, 1981.

Canada's Fitness. Ottawa: Canada Fitness Survey, Fitness Canada, June, 1982.

Physical Activity Patterns in Ontario. Toronto, Ministry of Culture and Recreation, Jan. 1981 (superseded by the current report).

The following research reports from Fitness Ontario, Ministry of Tourism and Recreation, also may be of interest to those planning or providing fitness programs.

Those Who Know But Don't Do

This report discusses characteristics of individuals who are interested in physical activity but are either inactive or only active at a low level. Strategies are suggested for encouraging these people to begin and/or to continue and increase their physical activity.

Promoting Physical Activity: A Social Psychological Perspective

This report considers motivations of people to become and to remain physically active.

Blue Collar Workers and Physical Activity

This report provides a socio-demographic profile of blue collar workers in Ontario and their participation and orientation regarding physical activity.

Appendix III

Physical Activity Index

In order to estimate the energy expenditure of participants in all the activities they have participated in, a physical activity index was constructed. This index takes into account the type of activity, intensity of participation, and frequency and duration of participation.

Energy expenditure has been measured in terms of Mets. This is a value of the metabolic energy cost expressed as a multiple of the resting metabolic rate (for example, an activity at 4 Mets, such as walking at medium intensity, requires four times as much energy as when at rest).

Chart 23 indicates the Mets values assigned to reported activities, at various levels of intensity. These values are based upon those used for the Canada Health Survey and/or indicated by Skinner (1975).

The physical activity index is calculated according to the following formula:

for each activity:

total times active per month \times Mets value for activity Chart 23 \times average time per session in minutes

This value was summed over all activities a person engaged in during the month, resulting in the total score in Mets.

Individuals were classified as low actives (less than 3000 Mets per month), medium actives (3000-6499 Mets per month), or high actives (6500 or more Mets per month). Examples of activities or combinations of activities at different levels for each of these categories are provided in Chart 24.

This physical activity index described above is similar to that used in the Canada Health Survey (that study did not use different intensity ratings for activities) and in other similar studies. The index assigns values based upon individuals' subjective estimates of the intensity of their activity, rather than upon actual measurement. Thus, scores discussed should not be treated as an exact figure, or as applying to the activity of any particular individual.

The index, as used in this report, is valid in providing a general indication of degree of activity of Ontario adults. It is particularly useful in indicating differences in degree of activity between various groups of people (e.g., men vs. women) and from one survey time to another.

Chart 23

Estimated Metabolic Costs (Mets) of Activities

		METS		
		LO	MED	HI
1	Walking	2	4	7
2	Jogging/Running	7	10	13
3	Swimming/Scuba	3	6	10
4	Hockey/Skating	6	8	12
5	Bicycling	3	6	9
6	Tennis/Badminton/Table Tennis	4	6	8
7	Basketball/Volleyball	4	8	12
8	Bowling/Lawn	2	3	4
9	Calisthenics (individual and group exercise)	7	9	12
10	Squash/Racquetball/Handball	8	10	12
11	Dancing	4	5	6
12	Weightlifting	4	6	8
13	Yoga	2	4	6
14	Rugby/Football	6	8	12
15	Soccer	8	10	12
16	Golf	2	3	4
17	Curling	3	4	5
18	Baseball	3	4	5
19	Gardening	2	4	6
20	Boating/Fishing	2	3	4
21	Horseback Riding	3	4	6
22	Other (Average)	4	6	8

Chart 24 Examples of Degree of Activity

Low (less than 3000 Mets per month)

- 1 *walking* at medium intensity three times a week, 45 minutes each time (2340 Mets)

or

- 2 *bicycling* at medium intensity twice a week, 30 minutes each time (1560 Mets)

plus

walking at medium intensity three times per week, 30 minutes each time (780 Mets - total for both activities: 2340 Mets)

or

- 3 *baseball* once a week, 120 minutes each time (2080 Mets)

Medium (3000-6499 Mets per month)

- 1 *walking* at high intensity three times a week 40 minutes each time (3640 Mets)

or

- 2 *jogging* at medium intensity (at about 8-10 km/hour) four times a week, 30 minutes each time (5195 Mets)

or

- 3 *swimming* at medium intensity three times a week, 45 minutes each time (3510 Mets)

plus

calisthenics at medium intensity five times a week, 15 minutes each time (2925 Mets - total for both activities: 6435 Mets)

High (6500 Mets or more per month)

- 1 *swimming* at high intensity four times a week, 30 minutes each time (5200 Mets)

plus

calisthenics at medium intensity four times a week, 15 minutes each time (2340 Mets - total for both activities: 7540 Mets)

or

- 2 *jogging* at medium intensity four times a week, 40 minutes each time (6930 Mets)

or

- 3 *walking* at medium intensity three times a week, 30 minutes each time (1560 Mets)

plus

bicycling at medium intensity twice a week, 30 minutes each time (1560 Mets)

plus

squash at medium intensity twice a week, 45 minutes each time (3900 Mets - total for all three activities: 7020 Mets)

Appendix IV

Questionnaire

Ask Everyone

- 1 a** What type of physical activity, physical exercise or physical recreation have you engaged in, if at all, within the last month? () - Did not engage, go to Q. 2

1st Mention: _____

Probe: Any Others?

2nd Mention: _____

Probe: Any Others?

3rd Mention: _____

- b** For each activity mentioned, ask:
How many times in the last month did you engage in this activity? (*Record Below*)
- c** What was the average length of time involved each time you did this activity? (*Record Below*)
- d** Please look at this card and tell me at what intensity you usually engage in this activity.

Type Of Activity (a)	No. of Times (b)	Average Time (c)	Intensity (d)
----------------------	------------------	------------------	---------------

1st Mention			high 1 medium 2 low 3
-------------	--	--	---

2nd Mention			high 1 medium 2 low 3
-------------	--	--	---

3rd Mention			high 1 medium 2 low 3
-------------	--	--	---

- 2** Do you think you get sufficient physical activity or do you feel that you should be more active?
- | | |
|-----------------------------------|---|
| Get sufficient activity | 1 |
| Should get more physical activity | 2 |
| Don't know | 3 |

Ask questions 3 & 4 only of those who did not engage or who are not active four or more times per month (total for all mentions in Q.1b)

3 On this card are some reasons people have for not being physically active. Which of these apply to you?

No Need For Me To Be Physically Active	1
Have Tried It But Find It Difficult To Keep It Up	2
No Opportunity to Be Physically Active	3
Don't Have Enough Free Time	4
Need More Encouragement	5
Physically Unable	6
Other (Specify)	7
None	8

4 Please look at this card and tell me which *one* statement would apply to you?

Definitely Planning On Beginning Some Form Of Physical Activity	
In The Near Future	1
Would Like To Take Part In Some Form Of Physical Activity	2
Definitely Not Interested In Taking Part In Physical Activity	3
Physically Unable To Take Part In Physical Activity	4
Other (Specify)	5
None	6

Ask questions 5 & 6 only of those who are active four or more times per month (total for all mentions in Q.1b)

5 When did you become physically active on a regular basis? *Do not read list.*

Within Last 6 Months	1
Within Last 7-12 months	2
More Than 12 Months Ago	3
Don't Know	4

6 Which one of the statements on this card best describes the way in which you exercise.

I Have A Fairly Consistent Pattern Of Exercise	
From Week To Week	1
My Pattern Of Exercise Tends To Be Irregular On A Week To Week Basis,	
As I Am Active At Some Times And Do Very Little Or None At All At Other Times	2
I Tend To Be Much More Active During Some Seasons Than During The Rest Of The Year	3
None	4

7 What is your opinion of the Ontario Government sponsoring programs to encourage people to become more physically active? Do you think it is an . . . *Read list*

Inappropriate activity of government?	1
Appropriate activity of government?	2
Essential activity of government?	4
Don't Know	5

Note: This questionnaire was used for the November 1979 and November 1981 surveys. For other surveys, only questions 1a, 1b, 1c, 1d and 5 were used. Questions used in addition to collect demographic data (see Appendix I) are not listed above.



Fitness
Ontario



Ontario

Ministry of
Tourism and
Recreation

Hon. Reuben C. Baetz
Minister
John R. Sloan
Deputy Minister